



Weill Cornell Medicine
Joan and Sanford I. Weill
Department of Medicine



Third Annual Weill Department of Medicine Research Retreat

Monday, October 29th, 2018 | 7:30 am–5:30 pm

Lectures | Belfer Research Building | Rooms 302-A/B/C/D

Poster Sessions | Belfer Research Building | Rooms 204 A/B/C

Lunch | Griffis Faculty Club

Keynote Talk | Uris Auditorium

Cocktail | Belfer Research Building | 2nd Floor

Keynote Speaker

Sekar Kathiresan, MD

Director, Center of Genomic Medicine at the Massachusetts General Hospital
Director, Cardiovascular Disease Initiative, Broad Institute
Professor of Medicine, Harvard Medical School
Keynote Speaker for the Third Annual Department of Medicine Research Retreat

Organizers

Anthony Hollenberg, MD

Professor and Chairman of Medicine

John P. Leonard, MD

Professor and Associate Dean of Clinical Research

Steven M. Lipkin MD, PhD

Professor and Vice Chair for Basic and Translational Research

Executive Committee

Mary E. Choi, MD

Professor of Medicine

Marshall J. Glesby, MD

Professor of Medicine

Paraskevi Giannakakou, PhD

Professor of Pharmacology in Medicine

Lisa Kern, MD

Associate Professor of Medicine

Lonny Levin, PhD

Professor of Pharmacology in Medicine

Holly G. Prigerson, PhD

Professor of Sociology in Medicine

Shahin Rafii, MD

Professor of Medicine

Kyu Y. Rhee, MD

Associate Professor of Medicine

Joseph M. Scandura, MD

Associate Professor of Medicine

Jonathan W. Weinsaft, MD

Associate Professor of Medicine

Meeting Description

The Third Annual Department of Medicine Research Retreat will provide a distinct forum to bring together a diverse range of established and emerging faculty and trainees and experts in complimentary fields to foster and expand our research efforts. The conference will feature a broad range of faculty with talks reflecting different career stages and research fields.

Participation by young investigators, trainees and residents is strongly encouraged. The central goals of the conference are to:

1) Highlight the various research programs within the Department—specifically to promote interaction between young and senior investigators and exchange of ideas which will shape the future direction of research within the Department

2) Foster the development of the next generation of researchers by encouraging participation of residents and post-doctoral trainees

3) Promote interactions and collaborations amongst our research faculty.

The conference will provide time for formal and informal discussions allowing for widespread participation of conference attendees at various career stages. Poster presentations will take place during the afternoon.

The full program and speaker bios are listed in the following pages below.

weillcornell.org

Program

Monday, October 29th, 2018

7:30 am

Retreat Breakfast and Check-in Belfer Research Building, 3rd FL

8:45 am

Introduction | Belfer 302 A/B/C/D

Dr. Anthony Hollenberg, MD

Dr. John P. Leonard, MD

Dr. Steven Lipkin, MD, PhD

9:00 am

Junior Faculty | Belfer 302 A/B/C/D

Laura Pinheiro, PhD

Assistant Professor of Health Services Research in Medicine, Division of General Internal Medicine

"Comorbidity Management in Cancer Patients"

Bishoy M. Faltas, MD

Assistant Professor of Cell and Developmental Biology, Division of Medicine

"Dissecting Clonal Evolutionary Dynamics in Urothelial Carcinoma"

Laurel Anne Monticelli, PhD

Instructor of Immunology in Medicine, Division of Pulmonary and Critical Care Medicine

"Innate immuno-metabolic mechanisms of lung inflammation"

10:00 am

Senior Faculty | Belfer 302 A/B/C/D

Gail J. Roboz, MD

Professor of Medicine, Division of Hematology and Oncology

"The WCM/NYP Leukemia Program: 2000-2018"

Douglas F. Nixon, MD, PhD

Professor of Medicine, Division of Infectious Diseases

"Retroviruses rule?!"

11:00 am

AM Poster Session

Belfer Research Building, Rooms 204 A/B/C

12:00 pm

Lunch | Griffis Faculty Club

1:00 pm

PM Poster Session

Belfer Research Building, Rooms 204 A/B/C

2:00 pm

Abstract Oral Presentations | Belfer 302 A/B/C/D

William Zhang, MD

Fellow in Pulmonary and Critical Care Medicine

"Local Iron Overload as a Novel Endotype in Chronic Obstructive Pulmonary Disease"

Justin Roy Kingery, MD, PhD

Instructor of Medicine, Center for Global Health, Division of General Internal Medicine

"Prevalence and Predictors of Myocardial Dysfunction in HIV-Infected and HIV-Negative Tanzanian Adults: a cross-sectional study"

Kristen R. Vella, PhD

Assistant Professor of Medicine, Division of Endocrinology

"Neuronal regulation of hepatic thyroid hormone clearance"

David Montrose, PhD

Instructor of Medicine, Division of Gastroenterology and Hepatology

"Exogenous and Endogenous Sources of Serine Contribute to Colon Cancer Metabolism and Growth"

3:00 pm

Break

3:30 pm

Keynote Lecture | Uris Auditorium

Sekar Kathiresan, MD

Director, Center of Genomic Medicine at the Massachusetts General Hospital

Director, Cardiovascular Disease Initiative, Broad Institute

Professor of Medicine, Harvard Medical School

Keynote Speaker for the Third Annual Department of Medicine Research Retreat.

"Genetic Basis for Heart Attack: Understanding Risk and Resistance"

4:30 pm

Reception, Belfer Research Building, 2nd Floor

Our Speakers

Laura Pinheiro, PhD is an Assistant Professor Professor of Health



Services Research in Medicine in the Division of General Internal Medicine. Prior to coming to Weill Cornell, Laura was at the University of North Carolina at Chapel Hill in the Department of Health Policy and Management and Lineberger Comprehensive Cancer Center. As a PhD health services researcher, Laura has expertise in health disparities, patient-reported outcome measurement, and cancer outcomes. Her current research program is focused in

cancer health disparities and, in particular, in comorbidity management among cancer patients undergoing treatment. Laura's work is supported by the New York Department of Health, Dean's Diversity and Healthcare Disparity Research Award, the Department of Medicine Pre-Career Award, and a 3-year Diversity Supplement from the National Heart, Lung and Blood Institute.

Bishoy M. Faltas, MD is an Assistant Professor of Medicine at Weill Cornell Medicine and an Assistant Attending in the Genitourinary Oncology Program in the Division of Hematology & Medical Oncology. Dr. Faltas completed his Hematology and Medical Oncology Fellowship at Weill Cornell Medicine, as well as additional training through a research fellowship in the laboratory of Dr. Mark A. Rubin. During this time, he led studies of the clonal evolution and the neoantigenic structure of platinum-resistant

bladder cancer. As a physician-scientist, Dr. Faltas conducts research focusing on understanding the molecular profiles of metastatic platinum-resistant urothelial bladder cancer. His research focus is on the mechanisms of mutagenesis and drug-resistance in bladder carcinoma, as well as immunogenomic studies of urological malignancies. By understanding the molecular changes that occur as urothelial cancer evolves under the effect of chemotherapy and metastatic spread, Dr. Faltas aims to identify potential drug targets for translation into therapeutic clinical trials. He is an active member of the The Caryl and Israel Englander Institute for Precision Medicine focusing on the application of genomic approaches to clinical trials by tailoring treatment based on the unique molecular profile of each patient's cancer. Dr. Faltas is the recipient of several research awards, including the Scott-Wadler Fellow Research award and the Weill Department of Medicine Fellow Award in Research. He has also received the NIH/NCATS CTSC KL2 Scholar grant, the American Society of Clinical Oncology Conquer Cancer Foundation Young Investigator Award and the Department of Defense Career Development Award. Dr. Faltas has published several articles in peer-reviewed journals such as the Nature Genetics, New England Journal of Medicine, JAMA Oncology, Journal of Clinical Oncology. Additionally, he is a reviewer for several journals including Nature Communications, American Journal of Medicine, Science Translational Medicine, and Nature Scientific Reports. Dr. Faltas is a member of the editorial board of the ASCO Post. He also served as an Associate Scientific Advisor for the journal Science Translational Medicine.

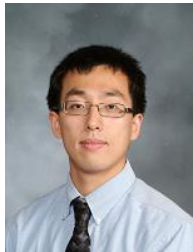
Laurel Anne Monticelli, PhD received her BS, MSc from the



University of California, San Diego in 2008 and her PhD in Immunology from the University of Pennsylvania in 2014. She undertook postdoctoral studies at Weill Cornell Medicine and in 2018 was appointed Instructor of Immunology in the Division of Pulmonary and Critical Care Medicine. Employing models of allergen exposure, pathogen infection, and chronic inflammation,

Dr. Monticelli's program takes a basic and translational approach to examining how metabolic re-wiring of the innate immune system regulates initiation of inflammation versus promotion of tissue repair.

William Zhang, MD is currently a fellow in the division of Pulmonary and Critical Care Medicine at the New York Presbyterian – Weill Cornell Medical Center. He completed his undergraduate studies at Johns Hopkins University and graduated from New York University School of Medicine in 2012. He has been at Cornell since then, finishing his internal medicine residency training in 2015 and then served an additional year as a Chief Resident. His research interest is in chronic obstructive pulmonary disease (COPD), in particular the role of iron metabolism in disease pathogenesis and progression, and his work includes multiple translational and foundational projects in this area.



Justin Roy Kingery, MD, PhD is an Instructor in Medicine and Hospitalist in the Weill Cornell Medicine Division of General Internal Medicine, Section of Hospital Medicine and Center for Global Health. He also serves as a Lecturer at Weill Bugando Medical College in Mwanza, Tanzania. He served as the first Weill Cornell Global Health Research Fellow from 2015-2018 after completing his Internal Medicine residency and MD/PhD training at the University of Louisville. Justin developed his interests of translational cardioimmunology and global noncommunicable diseases through work in basic science laboratories during his PhD and epidemiology/translational science during his work in Tanzania. His interest is on the interplay of the immune and cardiovascular systems with a current focus on the immune mechanisms of cardiovascular disease in HIV-infected populations and how this translates to the general, HIV-negative, population.



Kristen R. Vella, PhD is an Assistant Professor of Medicine in the Division of Endocrinology at Weill Cornell Medicine. Dr. Vella received her undergraduate degree from MIT and her PhD from the University of Massachusetts Amherst. She was a postdoctoral fellow in the laboratory of Dr. Anthony Hollenberg at Beth Israel Deaconess Medical Center and Harvard Medical School. Dr. Vella's research focuses on the molecular mechanisms underlying thyroid hormone regulation by metabolic signaling, particularly through the central hypothalamic axis and peripheral tissues such as the liver. She investigates the neurons necessary and sufficient to maintain thyroid hormone levels using transcriptomics and chemogenetics.



Our Speakers (continued)

David Montrose, PhD received his Bachelor's degree from Manhattanville College in 2001 and his Ph.D. from the University of Connecticut in 2010. During his graduate work with Dr. Daniel Rosenberg at the Health Center campus he studied the roles of arachidonic acid metabolites as well as pharmacological and dietary interventions in the pathogenesis of intestinal injury and tumorigenesis. After completing graduate school he pursued a



post-doctoral fellowship with Dr. Andrew Dannenberg at Weill Cornell Medical College. During his post-doc training David's work focused on identifying luminal metabolomic changes associated with colonic neoplasia as well as understanding the metabolism of early colonic lesions. After promotion to research associate in 2014 followed by appointment to Instructor in 2016 he has continued to study metabolism in intestinal pre-malignancy. Most recently, his work has focused on modulating luminal and host metabolism for cancer prevention and amelioration of inflammation in the gastrointestinal tract.

Gail J. Roboz, MD is professor of medicine and director of the Clinical and Translational Leukemia Programs at Weill Cornell Medicine and the New York Presbyterian Hospital in New York, New York, USA. Dr. Roboz graduated summa cum laude from Yale University and Alpha Omega Alpha from the Mount Sinai School of Medicine, where she also achieved the highest academic standing in the graduating class. Dr. Roboz completed internship in Internal Medicine at the Beth Israel Hospital in Boston and residency at



The New York Presbyterian Hospital. She completed fellowship in hematology and medical oncology at Weill Cornell Medical College and The New York Presbyterian Hospital. Dr. Roboz's research interests are in developmental therapeutics and novel clinical trial design for acute leukemias, myelodysplastic syndrome, and myeloproliferative disorders. She is the principal investigator on numerous investigator-initiated, cooperative group, and industry-sponsored clinical trials in these areas and has authored many related manuscripts and abstracts. Dr. Roboz serves on the Leukemia Core Committee for the Alliance clinical trials in oncology and is the Weill Cornell Principal Investigator for the MDS Clinical Research Consortium. She chairs the clinical committee of the European Leukemia Net (ELN) working group on minimal residual disease in acute myeloid leukemia. She also serves on the Scientific Advisory Board of the Aplastic Anemia and MDS International Foundation. Dr. Roboz has played an active role as a chair, speaker and panelist at numerous national and international conferences and is the recipient of prestigious honors and awards in the field.



Douglas F. Nixon, MD, PhD graduated with a Bachelor of Science from University College London in 1981 with First Class Honors, and received his medical degree from Westminster Hospital Medical School, London in 1984. He then went on to train as a pathologist and clinical virologist at the University of Oxford and received his Master's degree in 1991 and his Ph.D. in

Immunology in 1992. During his time at Oxford, he made

substantial contributions to the understanding of the newly emerged Human Immunodeficiency Virus (HIV). He spent the following two years at a biotechnology company in New York working on HIV vaccine development, before joining the Aaron Diamond AIDS Research Centre at the Rockefeller University, first as a postdoctoral fellow, and subsequently as an assistant professor, to investigate how antiviral T cells function in pediatric HIV infection. In recognition of several important contributions to HIV/AIDS research he made while there, he was awarded the Elisabeth Glaser Scientist Award in 2000. That same year he joined the Gladstone Institute of Virology and Immunology in San Francisco as an Associate Professor. In 2006, he accepted the appointment of Professor of Medicine at the University of California, San Francisco (UCSF), and as Associate Chief of the Division of Experimental Medicine at UCSF. From 2013 -2018 he was recruited to the George Washington University as Chair and Walter G. Ross Professor (with tenure) of the Department of Microbiology, Immunology and Tropical Medicine. In 2018, he was appointed Professor of Immunology in Medicine (Pending) at the Weill Cornell Medical College. A scientist and educator, he has actively pursued immunovirology research for more than 28 years, with his studies spanning from clinical research and human immunology, to basic virology, vaccine development and molecular biology. Among his many accomplishments, Nixon has gained recognition for publishing the first identification of an HIV specific cytotoxic T cell (CTL) epitope. He has published more than 250 articles in peer-reviewed journals, including first- or senior author publications in Nature, PNAS, Journal of Clinical Investigation, PLoS Pathogens, and holds several patents. He has served on multiple study section and grant review panels, and has mentored more than 50 students, postdocs and fellows. He is the past Chair of the NIH's AIDS Vaccine Research Subcommittee. Dr. Nixon is currently the Principal Investigator of the NIH's Martin Delaney collaborative for HIV Cure Grant, "BELIEVE".

Keynote Speaker: Sekar Kathiresan, MD is a physician scientist and a human geneticist, is the Director of the Center for Genomic Medicine (CGM) at Massachusetts General Hospital (MGH), Ofer and Shelly Nemirovsky MGH Research Scholar, Director of the Cardiovascular Disease Initiative at the Broad Institute, and Professor of Medicine at Harvard Medical School. Dr. Kathiresan leverages human genetics to understand the root causes of heart attack and to improve preventive cardiac care. Among his scientific contributions, Dr. Kathiresan has helped highlight new biological mechanisms underlying heart attack, discovered mutations that protect against heart attack risk, and developed a genetic test for personalized heart attack prevention. Dr. Kathiresan received his B.A. in history and graduated summa cum laude from the University of Pennsylvania in 1992 and received his M.D. from Harvard Medical School in 1997. He then completed his clinical training in internal medicine and cardiology at MGH, where he served as Chief Resident in Internal Medicine from 2002-2003. Dr. Kathiresan pursued research training in cardiovascular genetics through a combined experience at the Framingham Heart Study and the Broad Institute. In 2008, he joined the faculties of the MGH Cardiology Division, Cardiovascular Research Center, and Center for Genomic Medicine.

